

Abstract

The high-pressure pump has at least one pump element (15), with a pump piston (20) which is driven in a reciprocating motion and defines a pump work chamber (24) and into which in the intake stroke of the pump piston (20) fuel is aspirated from a fuel inlet (50) via an inlet valve (30), and from which in the pumping stroke of the pump piston (20) fuel is positively displaced via an outlet valve (32). The inlet valve (30) has a valve member (44), which with a sealing face (48), inclined relative to its longitudinal axis (45), cooperates with a valve seat (42c) disposed in a valve housing (40); by means of the valve member (44) in the opened state, when the valve member with its sealing face (48) is lifted from the valve seat (42c), a flow cross section between the valve member (44) and the valve housing (40) is opened between the fuel inlet (50) and the pump work chamber (24). In the opened state of the valve member (44), a region (52) having the smallest flow cross section between the valve member (44) and the valve housing (40) is disposed downstream, in the flow direction from the fuel inlet (50) to the pump work chamber (24), of the sealing face (48) of the valve member (44).